In response to the Office Action of June 27, 2005

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### <u>REMARKS</u>

### Summary of the Amendment

Upon entry of the amendment, Claims 1, 12, and 35 will have been amended. Claim 40 will have been canceled. Further, Claim 42-46 will have been added. Therefore, Claims 1-39 and 41-46 currently remain pending.

### Summary of the Office Action

In the Office Action, Claims 1-41 were rejected over the art of record. By the present amendment and remarks, Applicant submits that the rejections have been overcome, and respectfully request reconsideration of the outstanding Office Action and allowance of the present application.

### Traversal of Rejection Under 35 U.S.C. § 102(b)

Applicant traverses the rejection of Claims 1-8, 11, 13, 15-32, 35, and 41 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,033,146 to Shaw et al. (hereinafter "SHAW '146").

### A. Review of SHAW '146

SHAW '146 is directed to a method of producing surface seeded exposed particulate concrete. As claimed in SHAW '146, the method includes *inter alia*, the steps of preparing a subgrade, pouring concrete over the subgrade, screeding the concrete, finishing the top surface of the concrete to dispose a quantity of cement/fines paste to the top surface, broadcasting particulate onto the top surface, and mixing the particulate into the cement/fines paste.

In reference to the broadcasting of the particulate, SHAW '146 discloses, "[t]he particulates 18 are typically broadcast over the surface of the concrete mix by use of square point shovels and applied at a rate of approximately one pound per square foot of concrete mix 16 surface, but this may vary depending on the required finish. In this regard, the

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particulates 18 should not initially depress below the top surface of the concrete mix 16 but rather, should be broadcast solely to cover the same." SHAW '146, column 4, lines 9-16.

### B. In re independent Claim 1 (and dependent Claims 2-8, 11, 13, and 15-32)

Applicant's independent Claim 1 recites, <u>inter alia</u>, a method of producing surface seeded exposed particulate concrete <u>utilizing a material spraying device</u> to enable spraying of particulate <u>at distances greater than ten feet from a sprayer</u>. The concrete generally covers a large surface area, and the particulate is sprayed through air uniformly upon the upper surface of cement/fines concrete paste <u>greater than ten feet from a sprayer</u>. Applicant respectfully submits that SHAW '146 fails to disclose, and even teaches away from, at least the above-mentioned features of the present invention, as recited in independent Claim 1. Therefore, Applicant respectfully submits that Claim 1 is patentable.

In particular, Applicant notes that SHAW '146 indicates that "[t]he particulates 18 are typically broadcast over the surface of the concrete mix by use of square point shovels." SHAW '146 column 4, lines 11-12. In this regard, Applicant respectfully submits that SHAW '146 even teaches away from the use of the spraying device of Applicant's invention insofar as it teaches that the use of square point shovels is typical. Further, nowhere in SHAW '146 is there a different suggestion or teaching as to how the particulate should otherwise be broadcast, except for use of square point shovels. For these reasons, Applicant respectfully submits that SHAW '146 cannot anticipate Claim 1 because SHAW '146 fails to teach, suggest, or otherwise disclose the use of a spraying device to spray the particulate over large distances.

It is possible that the Examiner may believe that the "square point shovel" may be the "spraying device" of Claim 1. Nevertheless, Applicant respectfully believes that such interpretation would be in error. As mentioned above, SHAW '146 does not apparently teach or suggest any use whatsoever of a spraying device as claimed in the method of the present invention.

In contrast, the specification of the present invention teaches that the material "spraying device" may be "an industrial sprayer, such as a Goldblat material sprayer or a sandblaster." See Application at page 7, paragraph [0035]. Further, the specification further

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indicates that the material spraying device "allows for the uniform placement of the particulate over large surface areas. For example, the particulate can be uniformly sprayed for distances of about twenty to twenty-four feet from the sprayer as compared to traditional methods of broadcasting the particulate (e.g., manually) which can only achieve uniformity for a distance of about eight to ten feet away from the person broadcasting the particulate."

Id. at page 7-8, paragraph [0035]. Therefore, as illustrated above, SHAW '146 does not teach the use of the "spraying device" nor does SHAW '146 teach that the particulate could be sprayed over large surface areas.

Applicant further acknowledges that SHAW '146 utilizes, but does not apparently define the term "broadcasting." Nevertheless, it appears that "broadcasting," as read in light of the Specification, may be best construed to include short or minimal distance placement of the particulate upon the concrete. In particular, it would likely be construed to include placement of the particulate utilizing a square point shovel.

In contrast, Claim 1 clearly recites that the particulate should be "sprayed" utilizing a "spraying device." As already mentioned above, Applicant's Specification teaches that the "spraying" of particulate can be performed for distances up to twenty-four feet, in contrast to prior art methods that allowed only for minimal distances. Thus, Applicant believes that such distinction between the terms "broadcasting" of SHAW '146 and "spraying" of Claim 1, clearly differentiates Claim 1 from the prior art. Further, as mentioned above, SHAW '146 is wholly devoid of any teaching or suggestion related to the use of a spraying device.

Because SHAW '146 fails to disclose at least the above noted features of the present invention, Applicant submits that SHAW '146 fails to disclose each and every recited feature of the instant invention, and that the Examiner has failed to establish an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(b). Therefore, Applicant submits that the Examiner's rejection of independent Claim 1 is improper and should be withdrawn. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of Claim 1 under 35 U.S.C. § 102(b) and indicate that this claim is allowable over the art of record.

Further, Applicant submits that Claims 2-8, 11, 13, and 15-32, as well as Claims 9-10, 12, and 14, which depend from Claim 1 and were rejected under 35 U.S.C. § 103(a), are

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allowable at least for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of Claims 1-8, 11, 13, and 15-32 under 35 U.S.C. § 102(b) and indicate that these claims are allowable over the art of record.

### C. In re independent Claim 35 (and dependent Claim 41)

Applicant's independent Claim 35 recites, <u>inter alia</u>, a method of producing surface seeded exposed particulate concrete <u>utilizing a material spraying device</u> to enable spraying of particulate <u>at distances greater than ten feet from a sprayer</u>. Applicant respectfully submits that SHAW '146 fails to disclose, and even teaches away from, at least the abovementioned features of the present invention, as recited in independent Claim 35. Therefore, Applicant respectfully submits that Claim 35 is patentable.

As already mentioned above, Applicant notes that SHAW '146 indicates that "[t]he particulates 18 are *typically* broadcast over the surface of the concrete mix by use of *square point shovels*." SHAW '146 column 4, lines 11-12. In this regard, Applicant respectfully submits that SHAW '146 even *teaches away* from the use of the spraying device of Applicant's invention insofar as it teaches that the use of square point shovels is *typical*. Further, nowhere in SHAW '146 is there a different suggestion or teaching as to how the particulate should otherwise be broadcast, except for use of square point shovels. For these reasons, Applicant respectfully submits that SHAW '146 *cannot anticipate* Claim 35 because SHAW '146 fails to teach, suggest, or otherwise disclose the use of a spraying device to spray the particulate over large distances.

It is possible that the Examiner may believe that the "square point shovel" may be the "spraying device" of Claim 35. Nevertheless, Applicant respectfully believes that such interpretation would be in error. As mentioned above, SHAW '146 does not apparently teach or suggest any use whatsoever of a spraying device as claimed in the method of the present invention.

In contrast, the specification of the present invention teaches that the material "spraying device" may be "an industrial sprayer, such as a Goldblat material sprayer or a

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sandblaster." See Application at page 7, paragraph [0035]. Further, the specification further indicates that the material spraying device "allows for the uniform placement of the particulate over large surface areas. For example, the particulate can be uniformly sprayed for distances of about twenty to twenty-four feet from the sprayer as compared to traditional methods of broadcasting the particulate (e.g., manually) which can only achieve uniformity for a distance of about eight to ten feet away from the person broadcasting the particulate." Id. at page 7-8, paragraph [0035]. Therefore, as illustrated above, SHAW '146 does not teach the use of the "spraying device" nor does SHAW '146 teach that the particulate could be sprayed over large surface areas.

Applicant further acknowledges that SHAW '146 utilizes, but does not apparently define the term "broadcasting." Nevertheless, it appears that "broadcasting," as read in light of the Specification, may be best construed to include short or minimal distance placement of the particulate upon the concrete. In particular, it would likely be construed to include placement of the particulate utilizing a square point shovel.

In contrast, Claim 35 clearly recites that the particulate should be "sprayed" utilizing a "spraying device." As already mentioned above, Applicant's Specification teaches that the "spraying" of particulate can be performed for distances up to twenty-four feet, in contrast to prior art methods that allowed only for minimal distances. Thus, Applicant believes that such distinction between the terms "broadcasting" of SHAW '146 and "spraying" of Claim 35, clearly differentiates Claim 35 from the prior art. Further, as mentioned above, SHAW '146 is wholly devoid of any teaching or suggestion related to the use of a spraying device.

Because SHAW '146 fails to disclose at least the above noted features of the present invention, Applicant submits that SHAW '146 fails to disclose each and every recited feature of the instant invention, and that the Examiner has failed to establish an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(b). Therefore, Applicant submits that the Examiner's rejection of independent Claim 35 is improper and should be withdrawn. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of Claim 1 under 35 U.S.C. § 102(b) and indicate that this claim is allowable over the art of record.

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Further, Applicant submits that Claim 41, as well as Claims 36-39, which also depend from Claim 35, are allowable at least for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of Claims 35 and 41 under 35 U.S.C. § 102(b) and indicate that these claims are allowable over the art of record.

### Traversal of Rejection Under 35 U.S.C. § 103(a)

Applicant traverses the rejection of Claims 9-10 under 35 U.S.C. § 103(a) as being unpatentable over SHAW '146 in view of U.S. Patent No. 6,016,635 to Shaw et al. (hereinafter "SHAW '635"). Furthermore, Applicant also traverses the rejection of Claims 12, 14, 33-34, and 36-39 under 35 U.S.C. § 103(a) as being unpatentable over SHAW '146 in view of U.S. Patent No. 3,815,824 to Olson (hereinafter "OLSON").

## A. In re dependant Claim 9-10

Applicant traverses the rejection of Claims 9-10 under 35 U.S.C. § 103(a) as being unpatentable over SHAW '146 in view of SHAW '635. Applicant respectfully submits that such combination fails to teach all of the features of Applicant's invention.

SHAW '635 apparently teaches a method similar to that disclosed in SHAW '146, which is directed to producing surface seeded exposed particulate concrete. The method includes the steps of preparing a subgrade, pouring concrete over the subgrade, screeding the concrete, finishing the top surface of the concrete to dispose a quantity of cement/fines paste to the top surface, broadcasting particulate onto the top surface, and mixing the particulate into the cement/fines paste. However, in contrast to SHAW '146, SHAW '635 discloses the use of various types of aggregate, such as coarse sand, glass bead, and silica sand.

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# 1. <u>A Prior Art Reference (or References When Combined) Must Teach or Suggest</u> All the Claim Limitations

In the case at hand, the Examiner has not provided a prior art reference which teaches or suggests <u>all</u> the claim limitations of the pending claims. In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of presenting a prima facie case of obviousness. <u>In re Oetiker</u>, 977 F.2d 1443, 1445 (Fed. Cir. 1992). To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in prior art references or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. Second there must be a reasonable expectation of success. *Finally, the prior art reference (or references when combined) must teach or suggest <u>all the claim limitations.</u> See <u>Litton Industrial Products, Inc. v. Solid State Systems, Corp.</u>, 755 F.2d 158, 164, 225 U.S.P.Q. 34, 38 (Fed. Cir. 1985) ("The references fail not only to expressly disclose the claimed invention as a whole, but also to suggest to one of ordinary skill in the art modifications needed to meet <i>all the claim limitations*").

# 2. The Combination of SHAW '146 and SHAW '635 Fails to Teach All of the Features of Claims 9-10

Applicant respectfully submits that the combination of SHAW '146 and SHAW '635 fails to teach all of the features of Claims 9-10.

Claim 9 depends from independent Claim 1, and Claim 10 depends from Claim 9. In this regard, both Claims 9 and 10 include the features of independent Claim 1.

As discussed above, the "spraying" and "spraying device" features of independent Claim 1 are not taught, suggested, or otherwise disclosed in SHAW '146. SHAW '635 makes no teaching or suggestion with respect to "spraying" or the use of a "spraying device." Thus, for all of the same reasons mentioned above with respect to SHAW '146, SHAW '635 also fails to teach, suggest, or otherwise disclose the "spraying" and "spraying device" features of independent Claim 1.

Therefore, Applicant respectfully submits that the combination of SHAW '146 and SHAW '635 fails to teach all of the features of Claims 9-10. Accordingly, Applicant

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requests that the Examiner reconsider and withdraw the rejections of independent Claims 1 and 6 under 35 U.S.C. § 103(a) and indicate that these claims are allowable over the art of record.

#### B. In re dependant Claims 12, 14, 33-34, and 36-39

Claims 12, 14, 33-34, and 36-39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over SHAW '146 in view of OLSON.

The principle object of the OLSON invention appears to be that of mitigating the economic loss of not utilizing a ready-mix concrete truck 11 during winter months. See OLSON, column 1, lines 9-17. To solve this problem, OLSON provides for a sand spreader assembly 16 that may be attached onto a chute 12 of the ready-mix concrete truck 11 and utilized to spread a fluent mixture onto roads for purposes of de-icing the roads. See id. at lines 5-11. OLSON also teaches that the ready-mix truck 11 is very useful in this process because the fluent mixture, which comprises salt and sand, can be uniformly mixed in the mixer-body 10 of the truck 11 and provide optimum mixing results. See id. at lines 19-23.

The OLSON invention discloses that the fluent mixture is fed down the chute 12 onto a motor-driven rotating disk 40 of the spreader assembly 16. The disk 40 is horizontally positioned on the spreader assembly 16 and is positioned below the chute 12 for receiving the fluent mixture. See OLSON, column 3, lines 3-21 and Figures 1 and 3. The disk 40 includes vertically disposed throwing bars 42 which, when the disk 40 is rotating and the fluent mixture is poured thereupon, use centrifugal forces to throw the fluent mixture from the spreader assembly 16 toward the ground below. See id. OLSON does not disclose a prescribe range or distance to which the fluent mixture may be spread. However, the spreader assembly is apparently utilized while the truck 11 is in motion. See id., at lines 52-55 (indicating that a snow plow "may be provided at the front end of the truck 11 for use in conjunction with the sand spreader").

Applicant respectfully submits that neither SHAW '146 nor OLSON provide any teaching or motivation to combine the respective inventions disclosed therein, that such combination would destroy the function of the inventions taught in OLSON and SHAW

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'146, and for these reasons and others discussed below, such combination is a result of impermissible hindsight.

# 1. <u>Neither SHAW '146 Nor OLSON Provide Any Teaching or Motivation to Combine</u>

Applicant respectfully submits that neither SHAW '146 nor OLSON provide any teaching or motivation to combine the respective inventions disclosed therein. As discussed above, SHAW '146 is completely devoid of any teaching or suggestion to utilize a spraying device to "broadcast" the particulate.

Furthermore, OLSON also fails to provide any teaching whatsoever that the sand spreader may be utilized to spray particulate onto an uncured concrete surface. Although OLSON is entitled "Sand Spreader" and utilizes a ready-mix concrete truck, the invention disclosed therein bears no other similarity or teaching related to concrete preparation as disclosed in Claims 12, 14, 33-34, and 36-39. Further, the Examiner fails to provide any reference or teaching that shows the use of a sprayer device in concrete preparation.

With respect to Claim 14, the Examiner indicated that SHAW '146 and OLSON both disclose spreading the particulate uniformly onto a concrete surface, and that OLSON discloses spreading onto a 2 lane roadway, which "typically more than 10 feet wide per lane." However, Applicant reminds the Examiner that OLSON does not teach spreading particulate onto uncured concrete for preparing and finishing the concrete surface—instead, OLSON teaches de-icing of roads utilizing a sand/salt spreader. More importantly, OLSON does not even expressly or impliedly teach that its sand spreader functions over distances of more than ten feet. The Examiner has failed to show a reference to indicate that de-icing trucks (disclosed in OLSON) are capable of spreading the fluent mixture over a 20 foot distance. In fact, Applicant respectfully believes that a general knowledge of the process teaches against what the Examiner has alleged. For example, de-icing trucks typically move very slowly, occupy one lane of traffic, and only spread the fluent mixture into the occupied lane immediately behind the truck. Although the Examiner indicated that a 2 lane roadway is likely more 20 feet wide, de-icing trucks do not drive down the middle of the road to spread the fluent mixture, but instead occupy only one lane to avoid traffic disruptions. In fact,

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OLSON's teaching that such trucks may utilize a snow plow on the front end of the truck tends to support Applicant's belief that these trucks work on only one lane at a time. In any event, Applicant respectfully submits that the Examiner has failed to show that either SHAW '146 or OLSON suggest utilizing a spraying device in conjunction with concrete preparation.

Therefore, Applicant respectfully requests that the Examiner provide references that evidence a general knowledge teaches concrete preparation by spraying particulate utilizing a spraying device over distances of around 20 feet. If this is not available, Applicant requests that the rejection of Claims 12, 14, 33-34, and 36-39 be withdrawn.

# 2. <u>The Proposed Combination Would Destroy the Function of OLSON and SHAW</u> '146

Applicant further respectfully submits that the combination of OLSON and SHAW '146 would destroy the function of the inventions taught in OLSON and SHAW '146. As described above, OLSON teaches the use of a ready-mix truck with a sand spreader attached thereto for de-icing roadways. If such were utilized for spreading particulate onto an uncured concrete surface, the basic functionality of OLSON of providing ready-mix trucks some utility during winter months, would be destroyed. Certainly, de-icing and concrete preparation are not germane tasks. Additionally, concrete preparation rarely, if ever, takes place during the winter months. Thus, such a combination is contrary to and destroys the basic function of OLSON.

Furthermore, SHAW '146 teaches the "broadcasting" of particulate onto an uncured concrete surface. The combination proposed by the Examiner would require the use of a multi-ton truck on an uncured concrete surface. Applicant respectfully submits that such combination would destroy the functionality of SHAW '146 because it would effectively ruin the uncured concrete surface. In addition, as mentioned above, SHAW '146 expressly teaches the "use of square point shovels" for "broadcasting" the particulate onto the uncured concrete surface.

Therefore, Applicant respectfully submits that the combination of OLSON and SHAW '146 would destroy the function of the inventions taught in OLSON and SHAW '146. For this reason, Applicant respectfully submits that such combinations would be

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improper. Therefore, Applicant submits that Claims 12, 14, 33-34, and 36-39 are allowable over the art of record.

3. SHAW '146 Apparently Teaches Away From the Proposed Combination and Therefore, Such a Combination Constitutes Impermissible Hindsight

In addition, Applicant respectfully submits that the teachings of SHAW '146 apparently teaches away from the use of a spraying device for spraying particulate onto an uncured concrete surface. As described above, SHAW '146 teaches the "use of square point shovels" to "broadcast" the particulate. Nowhere in SHAW '146, or in any other reference cited by the Examiner, is distance or range of spraying particulate mentioned, taught, or even suggested as being a concern in concrete preparation. Applicant submits that SHAW '146, as the most pertinent reference, thus teaches away from the use of a spraying device to spray particulate onto an uncured concrete surface. Therefore, a motivation to combine SHAW '146 with OLSON is believed to be derived from impermissible hindsight.

For these reasons, Applicant submits that Claims 12, 14, 33-34, and 36-39 are allowable over art of record and respectfully requests allowance of the same.

#### Rejection Under § 112

In the Office Action, the Examiner indicated that the Specification did not provide for the use of a power trowel *after* a surface retarder has been placed onto the concrete surface. Thus, the Examiner rejected Claim 40 and stated that the Specification should be corrected. In order to expedite the allowance of the present application, Applicant has canceled dependent Claim 40. Thus, any deficiency or rejection is believed to be resolved.

#### New Claims 42-46

In addition to amending the claims as outlined above, the Applicant hereby submits new Claims 42-46 for consideration. Claims 42-46 incorporate some of the novel features of the present invention as discussed above. In particular, independent Claim 42 incorporates many of the features discussed above in reference to Claims 1 and 35. Claim 42 is written as Jepson claim as an improvement over processes of preparing surface seeded exposed

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particulate concrete. Applicant submits that no reference anticipates nor can a proper combination of SHAW '146 and OLSON disclose or suggest the subject matter of independent Claim 42. Further, Applicant submits that Claims 43-46 are allowable at least because they depend from and allowable base claim. Accordingly, Applicant respectfully requests that the Examiner consider the merits of newly submitted Claims 42-46 and indicate that these claims are allowable.

### Application is Allowable

Applicant respectfully submits that each and every pending claim of the present invention meets the requirements for patentability and respectfully requests the Examiner to indicate allowance of each and every pending claim of the present invention.

### **CONCLUSION**

In view of the foregoing, it is submitted that none of the references of record, when considered individually or in any proper combination thereof, anticipate or render obvious the Applicant's invention as recited in each of Claims 1-39 and 41-46. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Further, any amendments to the claims which have been made in this response and which have not been specifically noted to overcome a rejection based upon prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

If any additional fee is required, please charge Deposit Account Number 19-4330.

Date: 8/12/05 B

Customer No.: 007663

Respectfully submitted,

Kit M. Stetina

Registration No. 36,224

Stetina Brunda Garred & Brucker

75 Enterprise, Suite 250

Aliso Viejo, California 92656

Telephone: (949) 855-1246

Fax: (949) 855-6371